

Date: Tue, 11 Jan 94 18:10:16 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #25
To: Info-Hams

Info-Hams Digest Tue, 11 Jan 94 Volume 94 : Issue 25

Today's Topics:

BRAIN CANCER, LEUKEMIA FROM HAM RADIO
Daily Summary of Solar Geophysical Activity for 09 January
Daily Summary of Solar Geophysical Activity for 10 January
Fm Broadcast
Ohio/Penn DX Bulletin #142
Recent Ham Innovation
Telemetry continues from downed balloon

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 11 Jan 1994 18:11:30 GMT
From: swrinde!cs.utexas.edu!uwm.edu!math.ohio-state.edu!news.acns.nwu.edu!
casbah.acns.nwu.edu!rdewan@network.ucsd.edu
Subject: BRAIN CANCER, LEUKEMIA FROM HAM RADIO
To: info-hams@ucsd.edu

In article <1994Jan11.150658.25191@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> included a FAQ on radiation.

Thanks for including it Gary. I enjoyed reading it and learnt a lot
from it. The following paragraph about microwave ovens caught my attention:

>The molecular vibration caused by MW is how and why a MW oven works -
>exposure of the food to the microwaves causes water molecules to vibrate and
>get hot. MW and RF penetrate and heat best when the size of the object is
>close to the wavelength. For the 2450 MHz (2.45 billion Hz) used in

KFCST=1112 3111 0002 3000 27DAY-AP=004,004 27DAY-KP=1202 2111 1211 2211
WARNINGS=*MAJFLR;*SWF
ALERTS=**SWEEP:II=2@2244-2357UTC(~600KM/S)
!!END-DATA!!

NOTE: The Effective Sunspot Number for 08 JAN 94 was 60.0.
The Full Kp Indices for 08 JAN 94 are: 1o 2o 3- 3- 3- 2+ 2- 1+

SYNOPSIS OF ACTIVITY

Solar activity was low. Only one C-class flare occurred: an optically uncorrelated C1 at 1254Z. Region 7648 (N07W11), the largest group on the disk, showed overall simplification and was quiet. Region 7650 (N05W01) displayed modest growth.

Solar activity forecast: solar activity is expected to be low.

STD: A long-duration class C8.2/SF flare was observed from Region 7646 (S08W82) at 09/2323Z. The flare was accompanied by a moderate Type II sweep that had an estimated shock velocity of approximately 600 km/second.

The geomagnetic field has been at quiet levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be generally quiet to unsettled for the next two days. An increase to active is expected on day three due to a favorably positioned coronal hole.

Event probabilities 10 jan-12 jan

Class M	15/10/10
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 10 jan-12 jan

A. Middle Latitudes

Active	10/15/60
Minor Storm	05/05/10
Major-Severe Storm	01/01/01

B. High Latitudes

Active	10/15/55
Minor Storm	05/05/15
Major-Severe Storm	01/01/05

HF propagation conditions were normal to above normal over most regions today, particularly over the middle, low, and equatorial regions. MUFs have remained enhanced about 10 to 20 percent above normal and the quiet levels of geomagnetic activity have contributed to very good propagation over the middle and lower latitude paths, with MUFs being enhanced in many cases by as much as approximately 25 to 30 percent. No significant changes are expected until 12 January when effects from a well-placed coronal hole should produce minor signal degradation over the high and polar latitude paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 09/2400Z JANUARY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7645	N13W80	088	0050	CAO	09	003	BETA	
7646	S08W82	090	0190	DAO	08	003	BETA	
7648	N07W10	018	0300	DAO	10	023	BETA	
7649	S20W72	080	0000	AXX	00	001	ALPHA	
7650	N05W00	008	0100	DAO	09	018	BETA	
7647	S15W86	094					PLAGE	

REGIONS DUE TO RETURN 10 JANUARY TO 12 JANUARY

NMBR LAT LO

NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 09 JANUARY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
0618	0701	1054					160		
2244	2323	2357	7646	S06W76	C8.2	SF		44	II

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 09 JANUARY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
09/ 2244	2323	2357	S06W76	LDE	C8.2	73	2	

INFERRED CORONAL HOLES. LOCATIONS VALID AT 09/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS

	EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
55	S80E87	S85W90	S85W90	S12W13	011	EXT	NEG	183	10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
08 Jan:	0015	0020	0026	B8.1	SF	7646	S05W55			
	0155	0158	0200	B8.4	SF	7646	S11W56			
	0238	0245	0258	C1.0						
	0302	0317	0330	C1.6	SF	7646	S10W53			
	0636	0642	0649	B6.5						
	0757	0802	0806	B9.4	SF	7647	S15W67			
	0920	1031	1059	C2.4						
	1624	1639	1648	B9.8	SF	7647	S13W69			
	2236	2246	2254	B7.9						

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Region 7646:	1	0	0	3	0	0	0	0	003	(33.3)
Region 7647:	0	0	0	2	0	0	0	0	002	(22.2)
Uncorrelated:	2	0	0	0	0	0	0	0	004	(44.4)

Total Events: 009 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
08 Jan:	2236	2246	2254	B7.9				III

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Mon, 10 Jan 1994 20:57:28 MST
From: swrinde!cs.utexas.edu!math.ohio-state.edu!cyber2.cyberstore.ca!
nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 10 January
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

10 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 10 JANUARY, 1994

NOTE: Minor stratospheric warming exists over Siberia, Alaska, and Canada and is weakening. However, new warming over the Mediterranean area is intensifying and spreading northeastwards. The polar region is cooling.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 010, 01/10/94
10.7 FLUX=110.1 90-AVG=102 SSN=074 BKI=0010 0100 BAI=000
BGND-XRAY=B3.5 FLU1=6.8E+05 FLU10=1.1E+04 PKI=2111 2111 PAI=004
BOU-DEV=003,003,009,004,004,006,004,004 DEV-AVG=004 NT SWF=00:000
XRAY-MAX= C3.9 @ 0001UT XRAY-MIN= B3.0 @ 1906UT XRAY-AVG= B5.8
NEUTN-MAX= +003% @ 0750UT NEUTN-MIN= -001% @ 2035UT NEUTN-AVG= +0.6%

PCA-MAX= +1.1DB @ 1030UT PCA-MIN= -0.8DB @ 0005UT PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 0052UT BOUTF-MIN=55326NT @ 1721UT BOUTF-AVG=55341NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+080,+000,+000
GOES6-MAX=P:+133NT@ 1838UT GOES6-MIN=N:-051NT@ 0928UT G6-AVG=+102,+023,-025
FLUXFCST=STD:100,095,094;SESC:100,095,094 BAI/PAI-FCST=010,020,015/010,020,015
KFCST=2222 2333 3333 4443 27DAY-AP=004,009 27DAY-KP=1211 2211 2233 3221
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 09 JAN 94 was 58.5.
The Full Kp Indices for 09 JAN 94 are: 1o 1- 2- 1+ 2- 2- 2- 1o

SYNOPSIS OF ACTIVITY

Solar activity was low. Departing Region 7646 (S09W93) produced a long duration C8/SF at 09/2323Z with a moderate intensity Type II and minor centimeter bursts. Region 7650 (N05W13) grew slightly and now 7650 and 7648 (N06W24) appear as abutted bipoles.

Solar activity forecast: solar activity should continue at a generally low level. An isolated M-class flare from Region 7646 or the 7648/7650 complex is possible.

STD: Moderate Ca XV emissions were observed on the west limb today. The intensity of the emissions has decreased from strong levels which were observed yesterday.

The geomagnetic field was quiet at all sites.

Geophysical activity forecast: the geomagnetic field should be quiet until late on 11 Jan when a coronal hole related disturbance is expected to begin. Active to minor storm conditions are forecast for 12 Jan with unsettled to active levels forecast for 13 Jan.

Event probabilities 11 jan-13 jan

Class M	20/15/15
Class X	05/01/01
Proton	05/01/01
PCAF	Green

Geomagnetic activity probabilities 11 jan-13 jan

A. Middle Latitudes
 Active 20/50/30
 Minor Storm 10/30/15
 Major-Severe Storm 01/05/05

B. High Latitudes
 Active 20/50/30
 Minor Storm 10/30/15
 Major-Severe Storm 01/10/05

HF propagation conditions were normal to above normal over all regions. Conditions are expected to return to near-normal on 12 January for low and middle latitude paths, while high and polar latitude paths should see periods of minor signal degradation (mostly on night-sector circuits) due to anticipated minor enhancements in geomagnetic and auroral activity from a well placed solar coronal hole. Conditions should begin returning to near-normal over the higher latitudes on 13 and/or 14 January.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 10/2400Z JANUARY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7646	S09W93	088	0060	HAX	02	001	ALPHA	
7648	N06W25	020	0290	DAO	10	017	BETA	
7650	N05W14	009	0180	CSI	09	026	BETA	
7645	N13W93	088					PLAGE	
7649	S20W85	080					PLAGE	

REGIONS DUE TO RETURN 11 JANUARY TO 13 JANUARY

NMBR	LAT	LO
NONE		

LISTING OF SOLAR ENERGETIC EVENTS FOR 10 JANUARY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
NONE									

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 10 JANUARY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
NO EVENTS OBSERVED								

INFERRED CORONAL HOLES. LOCATIONS VALID AT 10/2400Z

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                ISOLATED HOLES AND POLAR EXTENSIONS
      EAST   SOUTH WEST   NORTH CAR TYPE POL AREA  OBSN
55   S39E25 S39E25 S11W28 S11W28 007 EXT  NEG   014 10830A
  
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SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

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-----
Date   Begin  Max   End   Xray  Op Region  Locn      2695 MHz  8800 MHz  15.4 GHz
-----
09 Jan: 0257  0302  0305  B7.3  SF  7646  S10W70
        1249  1254  1300  C1.0
        1531  1542  1548  B6.2
        1559  1605  1611  B7.6
        1617  1625  1643  B8.3
        1725  1728  1731  B6.7
        2244  2323  2357  C8.2  SF  7646  S06W76      44      25      28
  
```

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

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              C   M   X       S   1   2   3   4   Total   (%)
              -- -- --       -- -- -- -- --
Region 7646:  1   0   0       2   0   0   0   0     002  (28.6)
Uncorrelated: 1   0   0       0   0   0   0   0     005  (71.4)
  
```

Total Events: 007 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

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-----
Date   Begin  Max   End   Xray  Op Region  Locn      Sweeps/Optical Observations
-----
09 Jan: 2244  2323  2357  C8.2  SF  7646  S06W76      II,Continuum
  
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NOTES:

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Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
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V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Tue, 11 Jan 1994 18:04:18 GMT
From: netcomsv!netcom.com!wa2ise@decwrl.dec.com
Subject: Fm Broadcast
To: info-hams@ucsd.edu

>In article <2d31e75a-5415rec.radio.amateur.misc@vpnet.chi.il.us>
akcs.marz@vpnet.chi.il.us (chris andersen) writes:
>>Is it possible for a person with ham or modified ham set up to broadcast
>>on the 88-108 Mhz area???

Don't do this. the Funny Cookie Corporation goes after unlicensed broadcasters
and issues fines as big as \$20K. And they might take your amateur license,
too.

Date: Sun, 9 Jan 1994 14:22:13 -0700
From: swrinde!elroy.jpl.nasa.gov!usc!math.ohio-state.edu!cyber2.cyberstore.ca!
nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Ohio/Penn DX Bulletin #142
To: info-hams@ucsd.edu

SB DX @ ALLBBS \$OPDX.142
Ohio/Penn DX Bulletin No. 142

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 142
BID: \$OPDX.142
January 10, 1994
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio

Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DF4RD, DL7VEE & DXNL, AD1C, N2PNG, K4CEF & Southeastern Cluster Group, K4MZU, K8BL and K8MBH for the following DX information.

1A0KM, S.M.O.M. Activity during the first part of the week was probably the work of a pirate. Usually the group that activates this station will announce when they will be on the air. SYGS! (Save Your Green Stamp)

9M2, WEST MALAYSIA. Just a reminder that Neville, G3NUG, will be active from three islands off the west coast of West Malaysia during January and February. His callsign will be 9M2/G3NUG and he prefers the frequencies 14260 and 18140 kHz (both +/- 5 kHz). Look for him on: Pangkor Is. (AS-072) from January 14-21, Langkawi Is. (AS-058) from January 22-28 and Penang Is. (AS-016) from January 29 to February 10. Neville mentions that there has been no activity from AS-072 and AS-058 for about three years. All direct QSL request will be cleared by the end February. QSL via CBA.

BV9P, PRATAS ISLAND. A group consisting of BV5AF, BV2AP, BV4AS, BV40B and OH2BH were active from here on January 5th, for about 4 hours. It was reported that lots of VK and JA stations were heard calling the BV9P station on 14255 and 14260 kHz. There were no reports from anyone stateside that could not hear BV9P. Martti, OH2BH/VR2BH, was heard saying that another DXpedition would take place in March. Other reports also indicate that the BV9P group made about 630 QSOs with JA, BV and VK stations, and one single KH6 contact before going QRT.

EI4VRU CARDS. Barry, N2PNG, who has just returned from Ireland, states he made 1800 QSOs in the limited time he had to operate. There are two QSL routes available to use: N2PNG CBA or Barry Kennedy, POB 222, Austinburg, Ohio 44010.

HK0, MALPELO & GORGOLA ISLANDS. Ermanno was very active from Malpelo this past week as I2RA0/HK0 (not IT2RA0/HK0 as reported last week). He has gone QRT as of January 8th, but will returning on the air from Gorgola Island (in the Valle/Cauca Division group) January 12-15. It is unsure what this island will count for, so WFWL. There are many who hope his Malpelo operation will count (KYFC!).

HS, THAILAND. Fred, K3ZO, will be arriving in Thailand January 8th and returning on February 15th. During his time there, he will activate the club station HS0AC with his personal Thailand call, HS0ZAR. Fred plans to be very active on 40 meter CW, both morning and evening gray line paths. He states the bottom end of 40 meters is full of CB'ers from Indonesia on SSB, so look for him above 7015 kHz (sometimes even as high

as 7030, but not down on the very low end of the band). In regards to 80 meters, it is not normally permitted for amateurs to operate in Thailand, but he has asked for special permission to use the band from 2200z, February 4th thru 1700z February 6th, CW only. If he gets this permission, ("Which is by no means assured," states Fred) look for him around 3513 KHz. There will be no skeds or nets!

Just a reminder that Reiner, DL2VK, is now active as HS0/DL2VK until January 31st. He will be active on all modes (mostly on CW) including PACTOR.

P5DTG INFORMATION. For the many stations that worked P5DTG back in November of 1992, here is some bad news. Responses are being received from Josef, OK1DTG, the QSL Manager and Operator stating that the P5DTG operation was an unlicensed operation. The information was printed on Josef's OK1DTG QSL card with the QSO information blank and lined-through and the operators call on it.

PY0, ST. PETER & ST. PAUL ROCKS. According to the son of PS7KM the planned three week DXpedition by four Brazilian operators to St. Peter & St. Paul Rocks that was to start January 10th, will be delayed until January 20th and will only be for two weeks. There were no reasons given for the delay. The group plans to have two stations working 24 hours a day from 160 to 6 meters on CW/SSB/RTTY/Packet. QSL SSB/RTTY/6m contacts to PS7KM and all CW contacts to PT7WA.

S2, BANGLADESH. K4MZU reports working Manju, S21AM, around 1240Z on 20 meters longpath. Manju is a Bangladesh national and is newly licensed. QSL to PO Box 4000, Dhaka 1000, Bangladesh.

DXCC HAPPENINGS. Another "Application For New DXCC Country" status was sent to the DXAC. Actually this application was a request to reinstate Aldabra Atoll to the DXCC Countries List. The application was filed by Kurt Bindschedler, HB9MX/S79MX, who was active from Aldabra November 1st and 2nd in 1993. Kurt believes Aldabra qualifies under the DXCC Criteria rule, "Point 1: by virtue of Governmnet." Aldabra was deleted from the DXCC List, June 28, 1976. All contacts now made June 29, 1976 and after with Aldabra counts towards Seychelles (S7). Kurt states, "the Seychelles government is the administrative authority for all outlying islands with the exception of Aldabra. Aldabra is administered by non-governmental, non-profit scientific and conservation organization SIF (Seychelles Island Foundation). SIF consists of a board of trustees, the execxtive officer and several foreign well reputed personalities as members, with offices on Mahe and in London." Here are the coordinates: Longitude is 46 deg. 20 min. east / Latitude is 9 deg. 25 min. south.

KEEP THOSE BALLOTS COMING! (Only a 3 weeks to go!) Ballots for the Third Annual OPDX/NODXA DX Survey can be found in OPDX.137. Ballots can be sent to the following packet and online addresses listed below.

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and the FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send BitNet Mail to: aq474@cleveland.freenet@cunyvms or send PRODIGY Mail to: DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA

/EX

Date: Tue, 11 Jan 1994 17:14:52 GMT
From: amd!amdint.amd.com!dvorak.amd.com!positron!brian@decwrl.dec.com
Subject: Recent Ham Innovation
To: info-hams@ucsd.edu

In the January 1994 issue of IEEE Spectrum (the IEEE's general circulation magazine) was a note of interest to amateurs on page 24:

There is also a class of Non-Voice Non-Geostationary (NVNG) Mobile Satellites Services -- LEO satellites operating below 1GHz that have come to be known as "Little LEO" systems. On Nov. 16, they were allocated spectrum in the 150- and 400MHz bands. [....]

The NVNG service, based on technology pioneered by radio amateurs, will be used for brief data messages, monitoring and control of remote industrial, agricultural, and natural resource facilities, and consumer alarm, electronic mail, and vehicle location. Launches of the first NVNG satellites are expected later this year.

(The above is quoted, typos are probably mine...)

Brian McMinn N5PSS brian@amd.com

Date: Mon, 10 Jan 1994 09:38:52 -0700
From: swrinde!cs.utexas.edu!howland.reston.ans.net!math.ohio-state.edu!
cyber2.cyberstore.ca!nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Telemetry continues from downed balloon
To: info-hams@ucsd.edu

SUPERBALL 1-94: LAST CHANCE TO COPY

Superball 1-94, the test of superpressure balloon technology carrying amateur radio beacons, is still transmitting.

The balloon, launched on January 7 at 1626z, burst about three hours later and landed in Utah's Uinta mountains, likely between 9500 and 10,000 feet elevation. A search party, on January 8, got within about two miles of the believed crash site, but were unable to continue due to steep terrain and deep powder snow. Whether recovery will be possible before spring remains uncertain.

Three beacons on the payload are still transmitting and have enough battery power to continue for at least several days. Reception reports are solicited. Reports from Illinois and Ohio have indicated good signals. Of particular interest are reports of reception through the Russian RS satellites, because this will give an idea of how practical this method of relaying telemetry will be for a later, longer-lived flight. Reports should include the receiving site, date and time of reception (preferably in UTC), and the frames of copied data. The frequencies are as follows:

Frequency	Satellite	Satellite Output Frequency
-----	-----	-----
21.229 MHz	RS-12	29.429 MHz
28.322 MHz	(not on a satellite input)	
145.871 MHz	RS-10	29.371 MHz

The 21- and 145-MHz transmitters are on for three minutes and off for nine. They send CW (not MCW) carrying telemetry information.

The 28.322 MHz beacon simply keys on and off and does not attempt to send code. This beacon, alone, has solar power. The keying rate indicates whether it is operating on solar power or from batteries. Solar power is indicated by a rate near 40 pulses per minute; battery power by a rate near 20 pulses per minute. It is unknown whether recent snows may have covered the solar panel. This transmitter may die as batteries run down, and then come back to life next spring as snow melts and the solar panel is again exposed to sunlight.

Send reception reports via E-mail to:
WB7QBC@uugate.aim.utah.edu

End of Info-Hams Digest V94 #25
